

AWK-1100 Series

Industrial IEEE 802.11g/b wireless Access Point/Bridge/AP Client



- > IEEE 802.11g/b compliant
- > Power input by redundant 24 VDC power inputs or Power-over-Ethernet
- > Powerful security with WPA/802.1X/MAC address filtering
- > DIN-Rail or panel mounting ability
- > IP30 protected high-strength metal housing



The certification logos shown here apply to some or all of the products in this section. Please see the **Specifications** section or Moxa's website for details.

Introduction

Are your industrial applications hard to wire, or are your wiring costs out of control? Are you already using mobile equipment that connects over a TCP/IP network? If so, then the AWK-1100 Access Point/Bridge/AP Client could be what you're looking for. The AWK-1100 is rated to operate at temperatures ranging from 0 to 60°C and is rugged enough for any harsh industrial environment. Installation is easy, with either DIN-Rail mounting or distribution boxes. The DIN-Rail mounting ability, wide operating temperature range, and IP30 housing with LED indicators make the AWK-1100 a convenient yet reliable solution for any industrial wireless application.

- 64-bit and 128-bit WEP (Wired Equivalent Privacy)
- Enable/disable SSID broadcasts
- MAC-address-based access control
- IEEE 802.1X/RADIUS
- WPA (Wi-Fi Protected Access)

Useful Utilities and Remote Configuration

- Firmware upgrade from TFTP or HTTP
- Web-based Management
- Supports SNMP and UPnP
- Configuration backup and reset

Advanced Security Capability

Specifications

WLAN

Standards:

IEEE 802.11g/b for Wireless LAN
IEEE 802.3u 10/100BaseT(X) for Ethernet LAN
IEEE 802.3af for Power-over-Ethernet

Frequency Range:

2.4-2.4835 GHz, Direct Sequence Spread Spectrum (DSSS)

Data Rate & Modulation:

OFDM @ 54 Mbps, CCK @ 11/5.5 Mbps, DQPSK @ 2 Mbps, and DBSK @ 1 Mbps

Operating Channels:

USA: 1-11 (US)
Europe: 1-13 (EU)
Japan: 1-14 (JP)

Security:

64-bit and 128-bit WEP encryption, WPA (IEEE 802.1X/RADIUS and TKIP)

Data Rates:

1 Mbps, 2 Mbps, 5.5 Mbps, 6 Mbps, 9 Mbps, 11 Mbps, 12 Mbps, 18 Mbps, 24 Mbps, 36 Mbps, 48 Mbps, 54 Mbps

Transmit Power:

Typ. +18 dBm (+/- 1.5 dBm) @ 11 Mbps, +14 dBm (+/- 1.5 dBm) @ 54 Mbps

RX Sensitivity:

802.11b:
-81 dBm @ 11 Mbps, -85 dBm @ 5.5 Mbps, -86 dBm @ 2 Mbps, -87 dBm @ 1 Mbps

802.11g:
-68 dBm @ 54 Mbps, -70 dBm @ 48 Mbps, -74 dBm @ 36 Mbps, -78 dBm @ 24 Mbps, -81 dBm @ 18 Mbps, -84 dBm @ 12 Mbps, -85 dBm @ 9 Mbps, -86 dBm @ 6 Mbps

Software

Protocols: HTTP, DHCP, TCP/IP, RADIUS

Configuration: Web-based management

Client OS Support: Windows (95, 98, 2000, ME, NT, XP), Unix, Macintosh

Interface

Antenna: 2 dBi omni-directional antenna

Connector: RP-SMA (female)

RJ45 Port: 10/100BaseT(X) auto negotiation speed

LED Indicators: PWR1, PWR2, WLAN, LAN (Link/ACT)

Power Requirements

Input Voltage: 12 to 45 VDC, redundant dual DC power inputs or 48 VDC Power-over-Ethernet (IEEE802.3af)

Power Consumption: 0.3 A @ 24 V

Overload Current Protection: 1.6 A

Connection: Removable terminal block

Reverse Polarity Protection: Present

Physical Characteristics

Housing: metal, providing IP30 protection

Dimensions: 53.6 x 135 x 105 mm (2.11 x 5.31 x 4.13 in.)

Weight: 800 g

Installation: DIN-Rail mounting, wall mounting (optional kit)

Environmental Limits

Operating Temperature: 0 to 60°C (32 to 140°F)

Storage Temperature: -20 to 70°C (-4 to 158°F)

Ambient Relative Humidity: 5% to 95% (non-condensing)

Regulatory Approvals

Safety: EN60950-1, UL60950-1

Hazardous location: UL/cUL Class I, Division 2, Groups A, B, C, and D; ATEX Class I, Zone 2, EEx nC IIC (Pending)

Radio: EN300 328

EMC: EN301 489-1/-17

EMI: FCC Part 15C

*Please check Moxa's website for the most up-to-date certification status.

Reliability

MTBF:

200,000 hrs

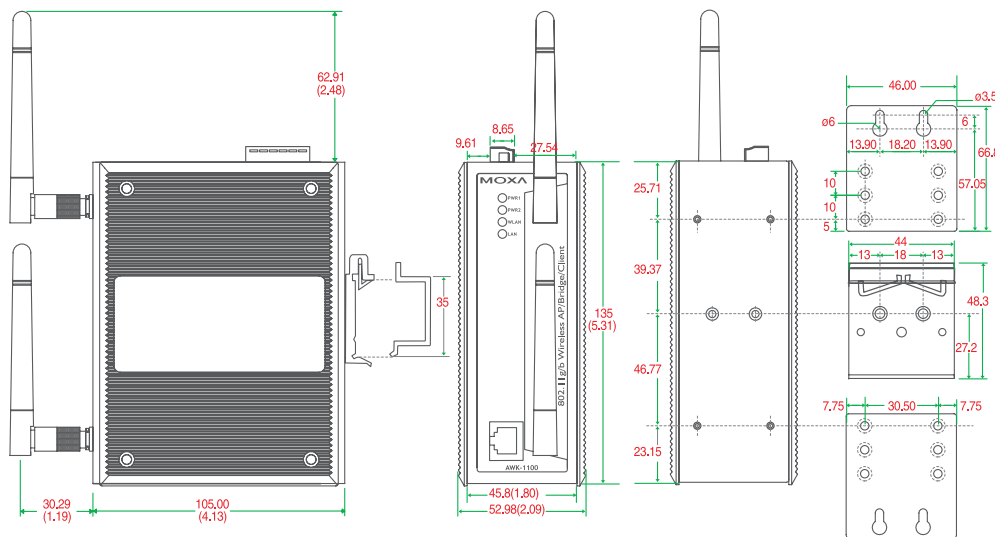
database: MIL-HDBK-217F, GB 25°C

Warranty

Warranty Period: 5 years

Details: See www.moxa.com/warranty

Dimensions



Ordering Information

Available Models

AWK-1100-US: IEEE 802.11g/b wireless AP/Bridge/AP Client, US band, 0 to 60°C

AWK-1100-EU: IEEE 802.11g/b wireless AP/Bridge/AP Client, Euro band, 0 to 60°C

AWK-1100-JP: IEEE 802.11g/b wireless AP/Bridge/AP Client, Japan band, 0 to 60°C

Optional Accessories (can be purchased separately)

DR-4524: 45W/2A DIN-Rail 24 VDC power supply with universal 85 to 264 VAC input

DR-75-24: 75W/3.2A DIN-Rail 24 VDC power supply with universal 85 to 264 VAC input

DR-120-24: 120W/5A DIN-Rail 24 VDC power supply with 88 to 132 VAC/176 to 264 VAC input by switch

WK-46: Wall mounting kit

RK-4U: 4U-high 19" rack mounting kit